

PO Box 2620 Ballston Spa, NY 12020 Ph: 518 885-0060

Letter of Transmittal

To: Chris Williams

VTRANS

61 VALLEY VIEW MENDON, VT 05701

Transmittal #: 2

Date: 4/21/2015

Job: M092 Rochester, VT Bridges

Subject: Submittal	ax: (802)/	86-3810			
WE ARE SENDING YOU	☐ Atta	ched	☐ Under sep	arate cover via	a the following items:
☐ Shop drawings	☐ Prin	ts	☐ Plans		Samples
□ Copy of letter	☐ Cha	nge order	☐ Specificati	ons 🔽	Submittal
Document Type	Copies	Date	No.	Description	
Submittal	1		4 Rev 0	2015 Mixes	
THESE ARE TRANSMITTE ☐ For approval ☐ For your use ☐ As requested ☐ For review and comme		Approve Approve Returned Other	: d as submitted d as noted d for corrections RETURNED AFTER	☐ ☐ ☐ LOAN TO US	Resubmit copies for approval Submit copies for distribution Return corrected prints
Remarks: Please find attac	ched mix d	esigns for 2	2015		
Сору То:					

From: MIKE GARN (W.M. SCHULTZ CONSTRUCTION

					Agency U	Ise Only
Concrete class	· HPC A					1P00-A-0
Additional Description		-			Mix Design #	II-00-A-0
	: CARRARA, JP & SONS INC - E MIDDLEBURY,	\/T				
	y Chuck French	. V I			Approved by Approved Date	
Designed B		PSI			Spec Book Year	2011
		. 51				
Mix Design Style Agg weight - SSD or Dry		-			riod from date of appr	
Agg weight - 33D of Dry	. 330		there is a change in	materiai, materiai pi	roperty or design para	meter.
Cement:			Considia Consider		lle /e	0.00 -6
			Specific Gravity		lb/cy	0.00cf
701.02 Source:						
Carrant Trans III.	:	•	0		16.7	0.00 -6
Cement Type III:			Specific Gravity		lb/cy	0.00cf
701.04 Source:						
Brand Name	:		0 10 0 11	0.000	044 11.7	0.04
Blended Cement:	LAFADOR TEDORAL MONTDEAU FAOT DU		Specific Gravity	3.020	611lb/cy	3.24cf
701.06 Source:	LAFARGE - TERCEM - MONTREAL, EAST PLA	NN I				
	: Tercem 3000					
Cement with Slag:			Specific Gravity		Ib/cy	0.00cf
701.07 Source:		-				
Brand Name	:	9				
Pozzolan:			Specific Gravity		Ib/cy	0.00cf
725.03(a) Source:						
Brand Name		ii.				
Fly Ash:			Specific Gravity		Ib/cy	0.00_ cf
725.03(a) Source:						
Brand Name	:					
Silica Fume:			Specific Gravity		lb/cy	0.00cf
725.03(b) Source:						
Brand Name						
Slag:			Specific Gravity		lb/cy	0.00cf
725.03(c) Source:						
Brand Name						
Water				31 gals	258.7 lb/cy	4.14 cf
Air Content Target				7.0 %		1.89 cf
Coarse Aggregate 3/8"	Absorption		Specific Gravity		lb/cy	0.00 cf
704.02A Source:	,					
Coarse Aggregate 3/4"	Absorption	1.24	Specific Gravity	2.580	1710 lb/cy	10.62 cf
704.02B Source:	CARRARA JP - E MIDDLEBURY, VT					
Coarse Aggregate 1 1/2"	Absorption		Specific Gravity		Ib/cy	0.00cf
704.02C Source:			,,,			
Fine Aggregate:	Absorption	0.98	Specific Gravity	2.613	1159_lb/cy	7.11 cf
704.01 Source:	CARRARA JP - E MIDDLEBURY, VT	F	ineness Modulus			
Air Entrainment Admixture			Specific Gravity		5.5 oz/cy	
725.02(b) Source:	W.R. GRACE & CO CAMBRIDGE, MA					
Brand Name:						
Retarder Admixture:			Specific Gravity		3 oz/cwt	
725.02(c) Source:	W.R. GRACE & CO CAMBRIDGE, MA		opcomo oravity			
Brand Name:						
High Range Water Reducer A			Specific Gravity		8 oz/cwt	
725.02(h) Source:	W.R. GRACE & CO CAMBRIDGE, MA		opodino Gravity		OZOW	
	ADVA 140M					
Other Admixtures:	715 471 140141					
other Admixtures.			Specific Gravity		1	0.00 cf
Source:			opcomo oravity	-		0.00
Brand Name.			Specific Gravity		ī	0.00 cf
Source:			openic dravity			0.00 0
Brand Name:			Specific Gravity		1	0.00 of
Source:			opening Gravity			0.00cf
ргапо ічате:			TOTAL	46 242	2720 15	27.00 -4
			TOTAL .	46.213	3739 lb	_27.00_cf
	A A color of the color of	Vat10	mandiff D	0.44		
			ementitious Ratio			
			m Water (gal/cy)		7.0	
			p Min/Max (inch)	min _	7.0 max	
			tent Min/Max (%)		8.5 max	
To France		Desig	n Unit Wt. (lb/cf)	138.47		
lotes:						

	Concrete class	: 2013+ Class A				Agency	
Additi-	onal Description		-				SC00-A-0
		: CARRARA, JP & SONS INC - E MIDDLEBURY	-\.C			Mix Design #	
Nea			<u>,</u> V I			Approved by	
		Chuck French	- 001			Approved Date	0011
	Design strength		_PSI			Spec Book Year	2011
اV م م م م م	lix Design Style	: Conventional	-	Mix designs are valid			
Agg weig	ht - SSD or Dry	. 220	_	there is a change in r	material, material pr	operty or design para	meter.
Comonti				0 10 0 11	0.450	500 II /	
Cement:	0	LEURINOPTHEAST SEMENT OS OLEMO		Specific Gravity	3.150	528lb/cy	2.69_ cf
701.02	Source:	LEHIGH NORTHEAST CEMENT CO - GLENSF	ALLS, N	IY			
O	Brand Name	: Type II	_			22.0	0.00
Cement Type II				Specific Gravity		lb/cy	0.00_ cf
701.04	Source:		_				
	Brand Name:		_				
Blended Ceme				Specific Gravity		lb/cy	0.00_ cf
701.06	Source:		-				
TOTAL TRANSPORT AND ADDRESS OF THE PARTY OF	Brand Name:		_				
Cement with SI	ag:			Specific Gravity		Ib/cy	0.00_ cf
701.07	Source:		_				
	Brand Name:		_				
Pozzolan:				Specific Gravity		lb/cy	0.00 cf
725.03(a)	Source:		_				
	Brand Name:						
Fly Ash:			•	Specific Gravity	2.320	132 lb/cy	0.91 cf
725.03(a)	Source:	HEADWATERS RESOURCES - BRAYTON PO	INT, MA				
	Brand Name:	Class F					
Silica Fume:			4)	Specific Gravity		lb/cy	0.00 cf
725.03(b)	Source:			,			
. ,	Brand Name:						
Slag:			•	Specific Gravity		lb/cy	0.00cf
725.03(c)	Source:			opcomo cravity.		ib/cy	
Water			ii.		32 gals	267_ lb/cy	4.28 cf
Air Content Tar	net				70 %	ID/Cy	1.89 cf
Coarse Aggrega		Absorption		Specific Gravity	7.0 /0	lb/cy	
704.02A	Source:	Absorption		Specific Gravity		по/су	0.00cf
704.027	Source.		•				
Coarse Aggrega	to 3/4"	Absorption	1 24	Cassifia Cassifu	0.500	4740 Ib/	40.00 -6
704.02B	Source:		1.24	Specific Gravity	2.560	1710 lb/cy	10.62_ cf
704.020	Source.	CARRARA JP - E MIDDLEBURY, VT					
Coarse Aggrega	40 4 4/0"	AL		0 '6 0 '1		11.7	
		Absorption		Specific Gravity		Ib/cy	0.00_ cf
704.02C	Source:						
Fine Aggregate:		Absorption	0.98	Specific Gravity_	2.613	1078 lb/cy	6.61cf
704.01	Source:	CARRARA JP - E MIDDLEBURY, VT	Fi	neness Modulus			
Air Entrainment				Specific Gravity_		4.1 oz/cy	
725.02(b)	Source:	W.R. GRACE & CO CAMBRIDGE, MA					
	Brand Name:	Darex II					
Retarder Admix				Specific Gravity_		3 oz/cwt	
725.02(c)		W.R. GRACE & CO CAMBRIDGE, MA					
	Brand Name:						
High Range Wat				Specific Gravity_		6 oz/cwt	
725.02(h)	Source:	W.R. GRACE & CO CAMBRIDGE, MA					
	Brand Name:	ADVA 140M					
Other Admixture	es:						
				Specific Gravity_		1	0.00 cf
	Source:						
	Brand Name:						
	•	A.		Specific Gravity		1	0.00 cf
	Source:						
	Brand Name:						
				Specific Gravity		1	0.00 cf
	Source:						
			-	TOTAL	46.513	3715 lb	27.00 cf
						<u></u>	
		Maximum V	Vater/Ce	mentitious Ratio	0 44		
				n Water (gal/cy)			
				Min/Max (inch)	2.0 min	10 may	
				ent Min/Max (%)		4.0 max	
				, , _	5.5 min _	8.5 max	
Notes:			Desigi	n Unit Wt. (lb/cf)_	101.08		
110100.							

					Agency U	Jse Only
Concrete cl	ass: HPC B	_			Mix ID F	1P00-B-0
Additional Descrip		_			Mix Design #	
	olier: CARRARA, JP & SONS INC - E MIDDLEBURY	<u>,</u> VT			Approved by	
	d By Chuck French	- 001			Approved Date	2011
Design stre		_PSI			Spec Book Year	80 17
Agg weight - SSD or	tyle: Conventional	-			riod from date of appro roperty or design para	
Agg weight - 33D of	Dry: <u>88D</u>	-	there is a change in	material, material pi	operty or design para	inieter.
Cement:			Specific Gravity		lb/cy	0.00 cf
701.02 Source	:			-	,	
Brand Na	me:	-				
Cement Type III:		_	Specific Gravity		lb/cy	0.00_ cf
701.04 Source		_				
Brand Na	me:	_				
Blended Cement:			Specific Gravity	3.020	<u>564</u> _ lb/cy	2.99cf
701.06 Source		ANI				
	me: Tercem 3000	-	Specific Crouity		lh/ov	0.00 of
Cement with Slag: 701.07 Source			Specific Gravity		Ib/cy	cf
	me:	-				
Pozzolan:		-	Specific Gravity	i.	lb/cy	0.00cf
725.03(a) Source	:			-		
	me:	-				
Fly Ash:		-	Specific Gravity		lb/cy	0.00 cf
725.03(a) Source		_				
Brand Na	me:	_				
Silica Fume:			Specific Gravity		Ib/cy	0.00_ cf
725.03(b) Source		_				
	me:	_				
Slag:			Specific Gravity		Ib/cy	0.00_ cf
725.03(c) Source		-				
Nater	me:	-		31 gals	258.7 lb/cy	4.14 cf
Air Content Target				7.0 %	ID/Cy	1.89 cf
Coarse Aggregate 3/8"	Absorption	ı	Specific Gravity		lb/cy	0.00 cf
704.02A Source		-				
		-				
Coarse Aggregate 3/4"	Absorption	1.24	Specific Gravity	2.580	820 lb/cy	5.09cf
704.02B Source	CARRARA JP - E MIDDLEBURY, VT	_				
	**			0.500		
Coarse Aggregate 1 1/2"		1.24	Specific Gravity	2.580	820lb/cy	5.09cf
704.02C Source		-				
Fine Aggregate:	Absorption	0.08	Specific Gravity	2 613	1272_ lb/cy	7.80 cf
704.01 Source		- 0.30 F	ineness Modulus	2.010		
704.01	CANADA E MIDDLE BOTT, VI		monoco modulac			
Air Entrainment Admixture	•		Specific Gravity		6 oz/cy	
725.02(b) Source						
Brand Na	me: Darex II	_				
Retarder Admixture:			Specific Gravity		3oz/cwt	
725.02(c) Source	,	-				
	me: Daratard 17		Casaifia Casaifa		0 07/044	
High Range Water Reduce			Specific Gravity		8oz/cwt	
725.02(h) Source	W.R. GRACE & CO CAMBRIDGE, MA me: ADVA 140M	-				
Other Admixtures:	IIIC. ADVA 140W	-				
ouror mannatures.			Specific Gravity			0.00 cf
Source						
Brand Na	me:					
			Specific Gravity			0.00 cf
Source		_				
Brand Na	me:	-	0		ı	0.00
			Specific Gravity			0.00cf
Source:		<u> </u>				
brand Na	me:	-	TOTAL	48.793	3735 lb	27.00 cf
			IOIAL	70.700	ID	
	Maximum ¹	Water/Cr	ementitious Ratio	0.49		
			ım Water (gal/cy)			
			p Min/Max (inch)		7.0 max	
			tent Min/Max (%)		8.5 max	
		Desig	gn Unit Wt. (lb/cf)	138.32		
lotes:						

						Agency	Use Only
		: 2013+ Class B	_				SC00-B-0
		With Fly Ash	-			Mix Design #	
Read		CARRARA, JP & SONS INC - E MIDDLEBURY,	<u>_</u> VI			Approved by	
Г	Designed by Design strength	7 <u>Chuck French</u> 3500	DSI			Approved Date Spec Book Year	2011
		: Conventional	-1 01	Miy dagiana	are valid for a 12 month p		
	t - SSD or Dry		-		nange in material, material		
			-				
Cement:					Gravity 3.150	489lb/cy	2.49cf
701.02	Source:	LEHIGH NORTHEAST CEMENT CO - GLENSF	ALLS, N	1Y			
Cement Type III:	Brand Name:	: Type II	-	Specific	Gravity	lb/cy	0.00 cf
701.04	Source:			Specific	Gravity	lb/cy	
701101			-				
Blended Cemen	t:		-	Specific	Gravity	lb/cy	0.00 cf
701.06	Source:						
	Brand Name:		•				
Cement with Sla 701.07	•			Specific	Gravity	lb/cy	cf
701.07	Source:						
Pozzolan:	Diana Name.		-	Specific (Gravity	lb/cy	0.00 cf
725.03(a)	Source:			Оросию			
3.5	Brand Name:						
Fly Ash:				Specific (Gravity 2.320	122_ lb/cy	0.84cf
725.03(a)	Source:	HEADWATERS RESOURCES - BRAYTON PO	NT, MA				
Ciliaa Fumar	Brand Name:	Class F		C!6- (O!b.	lle /e	0.00 -4
Silica Fume: 725.03(b)	Source:			Specific	Gravity	lb/cy	0.00cf
720.00(0)			•				
Slag:				Specific (Gravity	lb/cy	0.00 cf
725.03(c)	Source:						
	Brand Name:						
Water					<u>33</u> gals	_275.4_ lb/cy	4.41cf
Air Content Targ Coarse Aggregat		Absorption		Canalifia (7.0 %	lb/cy	cf
704.02A	Source:	Absorption		. Specific (Jiavily	іы/су	cf
701.027	Course.						
Coarse Aggregat	te 3/4"	Absorption	1.24	Specific (Gravity 2.580	1640 lb/cy	_10.19_cf
704.02B	Source:	CARRARA JP - E MIDDLEBURY, VT					
	4.4/011			0 10	0 "	16-4	0.00
Coarse Aggregat 704.02C	te 1 1/2" Source:	Absorption		Specific	Gravity	lb/cy	0.00_ cf
704.020	Source.						
Fine Aggregate:		Absorption	0.98	Specific (Gravity <u>2.613</u>	1171_ lb/cy	7.18 cf
704.01	Source:	CARRARA JP - E MIDDLEBURY, VT	F	ineness M	odulus		
Air Entrainment				Specific (Gravity	5oz/cy	
725.02(b)	Source: Brand Name:	W.R. GRACE & CO CAMBRIDGE, MA					
Retarder Admixto		Datex II		Specific (Gravity	2 oz/cwt	
725.02(c)	Source:	W.R. GRACE & CO CAMBRIDGE, MA		Оробіно			
S George Street Co.	Brand Name:	Daratard 17					
High Range Water				Specific (Gravity	6 oz/cwt	
725.02(h)	Source:	W.R. GRACE & CO CAMBRIDGE, MA					
Other Adminstration	Brand Name:	ADVA 140M					
Other Admixture	5:			Specific (Gravity	Ï	0.00 cf
	Source:			Opecine (Jiavity		0.00
	Brand Name:						
				Specific C	Gravity		0.00 cf
	Source:						
	Brand Name:			Cnorles (Provide	1	0.00 -4
	Source:			Specific (Gravity		cf
	Brand Name:						
				TOTAL	47.513	3697 lb	27.00 cf
		Maximum V			Ratio 0.49		
				m Water (1.0	
				p Min/Max tent Min/Ma	·	4.0 max 8.5 max	
					(lb/cf) 136.94	IIIdX	
Notes:			_0018	,	() 100.01		

						Ag	gency Us	se Only	
C	Concrete class:	Flowable Fill				Mix ID	F	F00-0	
	nal Description		-			Mix Desig	ın #		
		CARRARA, JP & SONS INC - E MIDDLEBURY,	VT			Approved			
iteau			- ' '						
		Chuck French	-			Approved			
	esign strength		PSI			Spec Boo	k Year	2011	1
Mix	Design Style:	Flowable Fill		Mix designs are valid	for a 12 month per	iod from date	e of approv	val or unles	s
Aga weigh	t - SSD or Dry:	SSD	- 0	there is a change in n					
			-	3		-1			
Camanti				Cassifia Cravity	2.450	100 II	lou	0.51	£
Cement:	•			Specific Gravity	3.150	100 Ib	J/Cy _	0.51 c	a
701.02	Source:	LEHIGH NORTHEAST CEMENT CO - GLENSF	ALLS, N	Υ					
	Brand Name:	Type II							
Cement Type III:				Specific Gravity		Ib	o/cy	0.00 c	f
701.04	Source:								
701101									
	Dianu Ivanie.			0 10 0 11				0.00	
Blended Cemen				Specific Gravity		lb	o/cy _	0.00 c	a
701.06	Source:								
	Brand Name:								
Cement with Sla	a:		•	Specific Gravity		lb	n/cv	0.00 c	:f
701.07	Source:			opoomo orarny.			, -		1.5
701.07			•						
	Brand Name:								
Pozzolan:				Specific Gravity		lb	o/cy _	0.00 c	f
725.03(a)	Source:								
	Brand Name:		•						
Fly Ash:			•	Specific Gravity	2 320	200 lb	v/cv	1.38 c	·f
	Source:	HEADWATERS RESOURCES - BRAYTON PO	NIT MA	opcomo oravity	2.020	200 10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1.00	
725.03(a)	Accessor and a contract of the		in I , IVIA						
	Brand Name:	Class F							
Silica Fume:				Specific Gravity		lb	o/cy	0.00 c	f
725.03(b)	Source:			200 -			-	-	
,,	Brand Name:								
Class	Brana Hamo.			Canalilla Cravity		II.	love	0.00	£
Slag:				Specific Gravity			,,cy _	<u>0.00</u> c	1
725.03(c)	Source:								
	Brand Name:								
Water					27 gals	225.3 lb	/cy	3.61 c	f
Air Content Targ	et			-	30.0 %		_	8.1 c	f
Coarse Aggregat		Absorption		Specific Gravity	70	lb	/cy -	0.00 c	
		Absorption		Specific Gravity			,,cy _	0.00	1
704.02A	Source:								
Coarse Aggregat	te 3/4"	Absorption		Specific Gravity		lb	/cy	0.00 c	f
704.02B	Source:						_		
Coarse Aggregat	0 1 1/2"	Absorption		Specific Gravity		Ib	lov	0.00 c	£
		Absorption		Specific Gravity_			,,cy _	0.00	ı
704.02C	Source:								
Fine Aggregate:		Absorption	0.98	Specific Gravity	2.613	2185 lb	/cy	13.40 c	f
704.01	Source:	CARRARA JP - E MIDDLEBURY, VT	Fi	ineness Modulus			-		
701101		ON THE WILL THE PERSON OF THE	• • •						
N	A -1 t4			0		0 -	_1		
Air Entrainment /				Specific Gravity_		3o:	z/cy		
725.02(b)		W.R. GRACE & CO CAMBRIDGE, MA							
	Brand Name:	Darafill							
Retarder Admixto	ure:			Specific Gravity_		0	z/cwt		
725.02(c)									
	Brand Name:								
				0					
ligh Range Wate		mixture:		Specific Gravity_		0	z/cwt		
725.02(h)	Source:								
	Brand Name:								
Other Admixture:									
				Specific Gravity_		1		0.00 c	f
	Courses			opcome cravity_				0.00	
	Source:								
	Brand Name:								
				Specific Gravity_				0.00 c	f
	Source:			_					
				Specific Growits		Ĭ		0.00 c	f
	0			Specific Gravity_				0.00 C	10
	Source:								
	Brand Name:								
	-			TOTAL	61.933	2710 lb		27.00 c	f
				_			_		
		Maximum	Nator/Ca	mentitious Ratio	0.83				
		iviaxiinum v		-					
				m Water (gal/cy) _					
				p Min/Max (inch) _		7.0 m			
			Air Cont	ent Min/Max (%)	10.0 min	40.0 m	ax		
				n Unit Wt. (lb/cf)					
lotes:			_ 55.9						

					Agency L	Ise Only
	oncrete class	: 2013+ Class C				C00-C-0
	nal Description		-		Mix Design #	000 0 0
		CARRARA, JP & SONS INC - E MIDDLEBURY,	VT		Approved by	
rtead		Chuck French	- V I		Approved by	
D	esign strength		DCI		Spec Book Year	2011
		Conventional	-131		<u> </u>	
	t - SSD or Dry:		-	Mix designs are valid for a 12 month pe		
Agg weigh	t - 330 01 DIY.	. 330		there is a change in material, material p	roperty or design para	meter.
C				Carallia Caralle 2 450	454 lb/a	0.00 -6
Cement:	0	LEUIQUI NODTUEACT OFMENT OO OF ENCE		Specific Gravity 3.150	451lb/cy	2.29 cf
701.02	Source:	LEHIGH NORTHEAST CEMENT CO - GLENSF	ALLS, IV	i r		
O (T III -	Brand Name:	туре п	• 3	0	11. 7	0.00
Cement Type III:				Specific Gravity	lb/cy	cf
701.04	Source:		- 1			
	Brand Name:		•		11.00	
Blended Cement				Specific Gravity	lb/cy	0.00_ cf
701.06	Source:					
2 1 10 120	Brand Name:					
Cement with Sla				Specific Gravity	lb/cy	0.00cf
701.07	Source:					
	Brand Name:					
Pozzolan:				Specific Gravity	lb/cy	0.00_ cf
725.03(a)	Source:					
	Brand Name:					
Fly Ash:				Specific Gravity 2.320	113 _ lb/cy	0.78 cf
725.03(a)	Source:	HEADWATERS RESOURCES - BRAYTON POP	NT, MA			
	Brand Name:	Class F				
Silica Fume:				Specific Gravity	lb/cy	0.00 cf
725.03(b)	Source:					
204000000000000000000000000000000000000	Brand Name:					
Slag:				Specific Gravity	lb/cy	0.00 cf
725.03(c)	Source:					
(.)						
Water				32gals	267lb/cy	4.28 cf
Air Content Targ	et			5.5 %		1.485 cf
Coarse Aggregat		Absorption		Specific Gravity	lb/cy	0.00 cf
704.02A	Source:	/ todo i pito i i				
104.0271	Cource.					
Coarse Aggregat	to 3/4"	Absorption	1 2/	Specific Gravity 2.580	1710 lb/cy	10.62 cf
704.02B	Source:	CARRARA JP - E MIDDLEBURY, VT	1.27	Opecine Gravity _2.500		10.02 0
704.020	oource.	OARTHAIOA SI - E MIDDEEDORT, VI				
Caaraa Aaaraaa	1 4 1 2 11	Absorption		Specific Cravity	lh/ou	0.00 of
Coarse Aggregat		Absorption		Specific Gravity	lb/cy	0.00cf
704.02C	Source:					
		A1	0.00	0 10 0 11 0 0 10	4000 11./	7.55 -(
Fine Aggregate:	0	Absorption	0.98	Specific Gravity 2.613	1230_ lb/cy	7.55 cf
704.01	Source:	CARRARA JP - E MIDDLEBURY, VT	- Е	ineness Modulus		
				0 17 0 1	0.5	
Air Entrainment		WE OF LOT A CO. CHIEFE CO. L.		Specific Gravity	3.5 oz/cy	
725.02(b)	Source:	W.R. GRACE & CO CAMBRIDGE, MA				
	Brand Name:	Darex II				
Retarder Admixti				Specific Gravity	2 oz/cwt	
725.02(c)	Source:	W.R. GRACE & CO CAMBRIDGE, MA				
	Brand Name:				12 2 "	
ligh Range Wate				Specific Gravity	6oz/cwt	
725.02(h)	Source:	W.R. GRACE & CO CAMBRIDGE, MA				
	Brand Name:	ADVA 140M				
Other Admixtures	s:				12	
				Specific Gravity		0.00 cf
	Source:					
	Brand Name:					
				Specific Gravity		0.00 cf
	Source:					
	Brand Name:					
				Specific Gravity		0.00 cf
	Source:					
	Brand Name:					
				TOTAL 45.013	3771 lb	27.00 cf
		Maximum V	Vater/Ce	ementitious Ratio 0.49		
				m Water (gal/cy) 33.1		
				p Min/Max (inch) 2.0 min	4.0 max	
				tent Min/Max (%) 4.0 min	7.0 max	
				n Unit Wt. (lb/cf) 139.67		
lotes:			Dealg	31. Still 141. (15/61) 100.01		

		X DEGIGIT GODINIGOION	Aganavil	lac Only
0	0		Agency U	
Concrete class		-		GM00-0
Additional Description			Mix Design #	
	CARRARA, JP & SONS INC - E MIDDLEBURY,	_ V I	Approved by	
	Chuck French 4000	- DCI	Approved Date	2011
Design strength		•II	Spec Book Year	
	Type IV Mortar/Grout	Mix designs are valid for a 12 month p		
Agg weight - SSD or Dry	. <u>880</u>	there is a change in material, material	property or design para	meter.
C		Consider Consider 2 150	040 16/60	470 of
Cement:	LEUIQUI NODTUEACT OFMENT OO OLENOE	Specific Gravity 3.150	940lb/cy	4.78cf
701.02 Source: Brand Name:	LEHIGH NORTHEAST CEMENT CO - GLENSF	ALLS, NY		
	Туре п	- Specific Crouity	lb/cy	0.00 cf
Cement Type III: 701.04 Source:		Specific Gravity	Ib/cy	
		-		
Plandad Camanti		Specific Gravity	lh/ov	0.00 of
Blended Cement: 701.06 Source:		Specific Gravity	Ib/cy	cf
		•		
Cement with Slag:		Specific Gravity	lb/cy	0.00 cf
701.07 Source:		Specific Gravity	ib/cy	
		•		
Pozzolan:		Specific Gravity	lb/cy	0.00 cf
725.03(a) Source:		Specific Gravity	Ib/cy	
		•		
Fly Ash:		Specific Gravity	lb/cy	0.00 cf
725.03(a) Source:			полсу	
		•		
Silica Fume:		Specific Gravity	lb/cy	0.00 cf
725.03(b) Source:		Specific Gravity	полсу	
		•		
Slag:		Specific Gravity	lb/cy	0.00cf
725.03(c) Source:		Specific Gravity	ID/Cy	
		•		
Water			_375.5_ lb/cy	6.02 cf
Air Content Target		45 gals	ID/Cy	0.54 cf
Coarse Aggregate 3/8"	Absorption	Specific Gravity%	lb/cy	0.00 cf
704.02A Source:	Absorption	Specific Gravity	ID/Cy	
704.02A Source.				
Coarse Aggregate 3/4"	Absorption	Specific Gravity	lb/cy	0.00 cf
704.02B Source:	Absorption	Specific Gravity	10/Cy	
704.02B Source.				
Coarse Aggregate 1 1/2"	Absorption	Specific Gravity	lb/cy	0.00 cf
704.02C Source:	Absorption	Opecine Gravity	ib/cy	
704.020 Source.				
Fine Aggregate:	Absorption	0.98 Specific Gravity 2.613	_2553_ lb/cy	15.66 cf
704.01 Source:	CARRARA JP - E MIDDLEBURY, VT	Fineness Modulus		10.00
704.01 Godice.	OARTAINA 01 - E MIDDLEBORT, VI	Tilletiess Woddids		
Air Entrainment Admixture		Specific Gravity	oz/cy	
725.02(b) Source:	SIKA CORPORATION - LYNDHURST, NJ			
Brand Name:	ON OTO CONTROL ET AD TO COT, NO			
Retarder Admixture:		Specific Gravity	3 oz/cwt	
725.02(c) Source:	W.R. GRACE & CO CAMBRIDGE, MA			
Brand Name:				
ligh Range Water Reducer Ac		Specific Gravity	10 oz/cwt	
725.02(h) Source:	W.R. GRACE & CO CAMBRIDGE, MA			
Brand Name:				
Other Admixtures:				
Specific performance admixture		Specific Gravity	1.5 lb/cy	0.00 cf
725.02(I) Source:	SIKA CORPORATION - LYNDHURST, NJ	10 1 Carlo d'Article 1 Carlo C		
Brand Name:				
		Specific Gravity		0.00 cf
Source:				
Brand Name:				
		Specific Gravity		0.00 cf
Source:				
Brand Name:				
		TOTAL 49.613	3870 lb	27.00 cf
	Maximum V	Vater/Cementitious Ratio 0.43		
		Maximum Water (gal/cy) 48.4		
		Slump Min/Max (inch) 4.0 min	8.0 max	
		Air Content Min/Max (%) 0.0 min	4.0 max	
		Design Unit Wt. (lb/cf) 143.33		
lotes:		0 000		



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Shaping the Future

Cardno

February 19, 2015

Report No. 25.30620.001-2

Mr. Ben Cota JP Carrara & Sons 2464 Case Street Middlebury, VT 05753

Re: Aggregate Test Results

Gentlemen:

2.

The following are test results of samples of aggregate as delivered to this laboratory on January 23, 2015.

1. Sample Description		
Sample No.	<u>Description</u>	Source
C-36a	3/4" Stone	JP Carrara Middlebury, VT
C-36b	Concrete Sand	JP Carrara Middlebury, VT

Washed Sieve Analysis (% passing by weight)			
Sieve Size (mm)	<u>C-36a</u>	<u>C-36b</u>	
3/4" (19.0)	100		
1/2 (12.5)	64		
3/8 (9.5)	37	100	
#4 (4.75)	2	95	
8 (2.36)	1	84	
16 (1.18)	1	70	
30 (.600)		49	
50 (.300)		22	
100 (.150)		8	
200 (.075)	0.6	2.5	
Fineness M odulus		2.73	

3.	Specific Gravity & Absor	ption (AASHTO T84,	AASHTO T8%
	Test	C-33a	C-33b
	Specific Gravity	2,580	2.613
	Absorption (%)	1.24	0.98

Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,

Kerun

Kevin Caine Laboratory Manager

KC/sjm